3115 Seventh Street
Lewiston, ID 83501
14 April 1993

Federal Communications Commission
Rule Making Committee, AM Services
Re ET Docket No. 92-298
Washington, D.C. 20554

Dear Mr. or Madam Secretary:

The question of AM stereo has been with us for several years, now. I recently heard that you would soon make a decision as to which of the AM systems we, as Americans, would abide by (ET Docket No. 82-298). I have worked in the AM and FM broadcast technical field for over twenty-two years, and I wish to state my opinion regarding this matter before the Commission.

I have seldom taken the word of any person, professional or otherwise, to be the absolute truth or best solution to any problem. Rather, I have personally studied and experimented with all claims of interest to me, and then carefully analyzed the results. And so it has been the case with the matter of AM stereo. I would encourage other to do the same.

My opinion regarding AM stereo is based on evidence derived from my personal experimentation with several of the Sony multi-mode radios (SRF-A1, SRF-A100, XR-A33, and SR-A37), and others, as well as first-hand experience with the Kahn AM stereo transmission system. Comparatively, AM stereo receivers seem to differ in terms of bandwidth, AGC, distortion, noise, etc. The most notable differences that I found were between the AM stereo modes. I restrict my comparison of systems in this letter to those of Motorola and Kahn.

My early involvement with high-frequency single-sideband Amateur communication made the Kahn system of independent sideband particularly interesting. It seemed to address the requirements of spectral efficiency, phase linearity, and interference tolerance so necessary in good AM communication. However, I also had equal interest in Motorola's C-Quam, as well as the Magnavox, Harris, and Belar methods--all somewhat related.

Under strong-signal conditions (50 mV, or higher), I found the Motorola and Kahn systems to be--more or less--equally acceptable. Under long distance night-time conditions (less than 50 mV) , the Kahn system was notably superior.

I first noticed that the Motorola system suffered from what some have called

fact, I had to increase simulated co-channel interference by 10 dB to create even mildly objectionable amplitude variations. Co-channel interference, in the Kahn system, remained similar to standard monophonic AM, where only a simple "mixing" of the two audios occurred.

Adjacent channel interference, in the Kahn system, was pleasantly spaced to the left and right of the "center image." Because of this, it was possible to focus one's attention. In the Motorola system, adjacent channel interference was scattered throughout both stereo channels, and impossible to separate, or mentally "tune out" from the main signal.

Based on this evidence, I believe the Kahn system to be superior to all others. I would think that it would also be the best system to adopt as an American AM stereo standard--biased as my opinion may seem.

Recently, I have heard some people argue that digital AM stereo would replace